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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,473	12/03/2003	Pang-Lun Yang	10113031	5883
34283	7590	04/14/2005	EXAMINER	
QUINTERO LAW OFFICE 1617 BROADWAY, 3RD FLOOR SANTA MONICA, CA 90404			HAN, JASON	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/726,473	Applicant(s) YANG, PANG-LUN	
	Examiner Jason M. Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 1B: (25); Figure 1C: (35). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities:
  - a. Page 2: Line 10: Typographical error – "light guide plate 32" should read as "light guide plate 31";

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Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 5, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Myers (U.S. Patent 6330111).

5. With regards to Claim 1, Myers discloses a backlight module including:

- A light guide plate [Figures 1-2A: (1)] having a first surface [Figures 1-2A: bottom side of (1)] and a second surface [Figures 1-2A: (5, 6)] opposite thereof and defining a plurality of grooves [Figures 1-2A: (4)] on the second surface;
- A reflecting plate [Figures 1-2A: (3)]; and
- A plurality of light sources [Figures 1-2A: (2)] disposed between the light guide plate and the reflecting plate, whereby each light source is disposed corresponding to each groove, wherein light is emitted by the light source, reflected by the reflecting plate, reaches the light guide plate through the second surface, and exits the light guide plate from the first surface.

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6. With regards to Claim 3, Myers discloses the cross-sectional shape of each of the grooves being substantially triangular [Figures 1-2A: (4)].

7. With regards to Claim 5, Myers discloses the cross-sectional shape of each of the grooves being substantially polygonal [Figures 1-2A: (4)].

8. With regards to Claim 7, Myers discloses the light sources [Figures 1-2A: (2); Figure 9: (30); Column 6, Line 66 – Column 7, Line 7] being lamps/LED lamps.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers (U.S. Patent 6330111) as applied to Claim 1 above.

Myers discloses the claimed invention as cited above, but does not specifically teach the cross-sectional shape of each of the grooves being substantially arc-shaped or rectangular-shaped.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the plurality of grooves out of a desired cross-sectional shape [e.g., arc (re: Claim 2), triangular (re: Claim 3), rectangular (re: Claim 4), polygonal (re: Claim 5)], since it has been held to be within the general skill of a worker that mere change of form or shape of an invention involves only routine skill in the art. *Span-Deck Inc. v. Fab-Con, Inc.* (CA 8, 1982) 215USPQ 835. In this case, it is

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an obvious modification that one could easily modify the cross-sectional shape of the grooves to provide a desired optical effect with the illumination.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myers (U.S. Patent 6330111) as applied to Claim 1 above, and further in view of Lee et al. (U.S. Patent 6788359).

Myers discloses the claimed invention as cited above, but does not specifically teach the backlight module incorporating a protecting film disposed on the first surface, a prism sheet disposed on the protecting film, and a diffusing sheet disposed on the prism sheet.

Lee teaches, "A reflection plate 6 is formed under the lower plane of light guide plate 4, and a diffusion sheet 8, a first prism sheet 10, a second prism sheet 12 and a protecting film 14 are sequentially stacked on the upper plane of light guide plate 4. [Column 2, Lines 22-26]"

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify the backlight of Myers to incorporate the protecting film, prism sheet, and diffusing sheet of Lee in order to uniformly enhance the distributed illumination.

The examiner further makes note that the claimed invention of Myers in view of Lee does not specifically teach the specific arrangement/order, wherein the protecting film followed by the prism sheet and diffusing sheet are disposed one atop another over the light guide plate. However, it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japiske*, 86 USPQ 70), and would therefore be

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obvious to one ordinarily skilled in the art to modify the backlight of Myers in view of Lee to incorporate the specific arrangement/order to provide a desired optical effect on the illumination. Regardless, the specific arrangement/order does not affect the overall utility of the components, and is considered functionally equivalent.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art pertinent to the current application, but are not considered exhaustive:

US Patent 5143433 to Farrell;

US Patent 5676453 to Parkyn, Jr. et al;

US Patent 6134092 to Pelka et al;

US Publication 20010017774 to Ito et al;

US Publication 20010021110 to Nakayama et al;

US Publication 20020097578 to Greiner;

US Patent 6467931 to Tenmyo;

US Patent 6601962 to Ehara et al;

US Patent 6700633 to Cho;

US Patent 6805468 to Itoh et al;

US Patent 6808279 to Greiner.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (3/11/2005)



**JOHN ANTHONY WARD**  
**PRIMARY EXAMINER**